(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 January 2001 (18.01.2001)

PCT

(10) International Publication Number
WO 01/03646 A3

(51) International Patent Classification[7]: G01J 3/28

(21) International Application Number: PCT/US00/19273

(22) International Filing Date: 14 July 2000 (14.07.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/143,801 14 July 1999 (14.07.1999) US
09/507,293 18 February 2000 (18.02.2000) US

(71) Applicants: SPECTRAL DIMENSIONS, INC. [US/US]; Suite 102, 3403 Olandwood Court, Olney, MD 20832 (US). THE GOVERNMENT OF THE UNITED STATES OF AMERICA represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; 6011 Executive Boulevard, Suite 325, Rockville, MD 20852-3804 (US).

(72) Inventors: LEWIS, E., Neil; 2440 Saint Albert Terrace, Brookville, MD 20833 (US). STRACHAN, David, J.; 12 Wood Raven Court, Baltimore, MD 21234 (US). KIDDER, Linda, H.; 18003 Golden Spring Court, Wolney, MD 20832 (US).

(74) Agent: ELBING, Kristofer, E.; 187 Pelham Island Road, Wayland, MA 01778 (US).

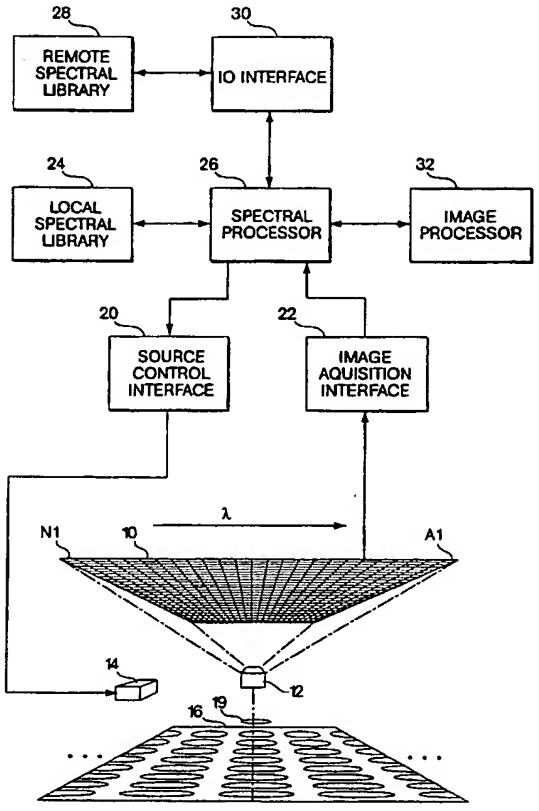
(81) Designated States *(national)*: BR, CA, JP.

(84) Designated States *(regional)*: European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published:
— *With international search report.*

[Continued on next page]

(54) Title: HIGH-VOLUME ON-LINE SPECTROSCOPIC COMPOSITION TESTING OF MANUFACTURED PHARMACEUTICAL DOSAGE UNITS



(57) Abstract: A pharmaceutical dosage unit manufacturing process control apparatus is disclosed. This apparatus includes an image sensor (10), including an array of detector elements, located generally proximate a flow of pharmaceutical dosage units (18). A spectrally selective element (12) simultaneously projects a plurality of spectrally-discrete versions of a same image of the flow of pharmaceutical dosage units onto the image sensor. A spectral processor is responsive to an output of the image sensor.

WO 01/03646 A3

(88) Date of publication of the international search report:
25 May 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.